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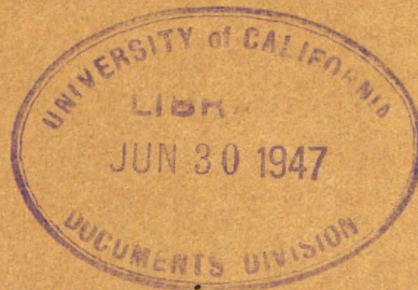
WAR DEPARTMENT
MAINTENANCE MANUAL
AND PARTS CATALOG

PORTABLE CIRCULAR SAW
MODEL 2127, PNEUMATIC, HAND

SKILSAW, INC.

CHICAGO, ILL.

DEC. 5, 1942



TM5-4004

WAR DEPARTMENT

**TM5-4004, Maintenance Manual
and Parts Catalog, Portable Cir-
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matic, published by SKILSAW,
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June 10, 1941.)**

G. C. MARSHALL
Chief of Staff

Official:

J. A. ULIO,
Major General
The Adjutant General

Purchase Order Numbers For All Skilsaw Model 2127 Pneumatic Saws Furnished to Engineer Corps

Contract No.	Order No.	Chicago Order No.
W978ENG4951	57097	—
W978ENG5570	57797	C-10-0CE
W-1122-ENG-1093		C-3369
W-1122-ENG-1051		DA-1487-C
W-1122-ENG-1182		C-3571
W-1122-ENG-1295		C-3793
W-1122-ENG-1348		C-3926
W-1088-ENG-2149		C-4902

**Skilsaws Furnished Under Above Purchase Orders
Carry Serial Numbers of 126171 and Upward**

Trade name: SKILSAW

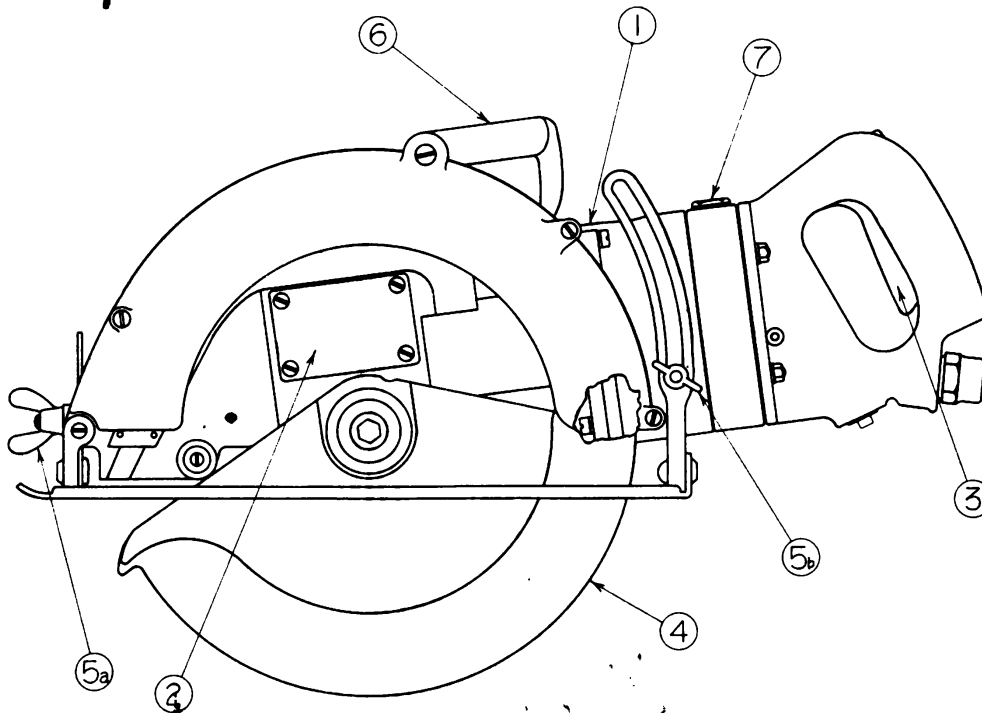
SKILSAW, INC.

5033 Elston Avenue

Chicago, Ill.

MODEL 2127 PNEUMATIC SKILSAW

MECHANICAL FEATURES



1. **BODY**—Cast aluminum alloy.
2. **GEAR CASE**—Encloses worm reduction and four ball bearings—retains ample supply of lubricating oil. Keep oil level to point where worm is covered. Do not completely fill gear case because the heat generated during sawing will expand and force the oil out through the oil seals.
3. **TRIGGER**—Releases air into motor. Will not operate while safety lock is in place.
4. **TELESCOPIC GUARD**—Spring operated—automatically returns to closed position after cut is completed.
5. **BASE ADJUSTMENT**—(a) Loosening this wing nut permits tilting foot for bevel cuts up to 45°. (b) Loosening this wing nut permits up and down adjustment of foot for straight cuts from 2 3/8" to 4 3/8" deep.
6. **TOP HANDLE**—This auxiliary handle aids operator in cutting.
7. **LUBRICATING PLUG**—For lubricating all of the air motor except rotor shaft bearings and the governor. 9/16" open end wrench (supplied in kit) is used to remove or tighten plug. (For complete lubrication instructions see page 3.)

MOTOR—Pneumatic rotary type designed for operation on 80 to 100 lb. air pressure. Requires approximately 50-55 cu. ft. of free air per minute under normal load and approximately 75 cu. ft. at maximum horse power. **GEARS**—Worm gear is made of chrome-nickel molybdenum steel heat-treated for extra toughness. Worm wheel of cast tough heat-treated bronze alloy. Worm gear and worm wheel are matched and tested, as a pair, on precision equipment. **BALL BEARINGS**—High grade ball bearings throughout. **SHAFTS**—Chrome-nickel alloy steel, heat-treated.

MODEL 2127 PNEUMATIC SKILSAW

OPERATING INSTRUCTIONS

GENERAL DESCRIPTION

SKILSAW Model 2127 Pneumatic Saw is designed to operate on 80 to 100 lb. pressure. It requires approximately 50-55 cu. ft. of free air per minute under normal load and approximately 75 cu. ft. when delivering maximum horse-power. It is equipped with a 12" blade. Depth of cut on straight cuts from $2\frac{3}{8}$ " to $4\frac{3}{8}$ ". Bevel cuts up to $3\text{-}5/16$ " at 45° . Maximum capacity is based upon the use of a full size saw blade. After blade has been jointed (see jointing) its capacity is reduced in proportion to the decrease in diameter of the blade.

SPECIAL TOOL KIT—A special metal tool kit is furnished with SKILSAW Pneumatic Saw. It is $12\frac{1}{2}$ " square by 4" deep and contains the following tools and accessories:

3	#382 Combination rip and cross cut blades	1	1" open end wrench (for hose nipple)
1	#154 6" adjustable rip fence	1	$\frac{3}{8}$ " open end wrench (for P55000 nuts)
1	Hand hammer (for saw set)		
1	Screw driver (for miscellaneous screws)	4	8" three-corner mill bastard files; $\frac{3}{4}$ " base and 30 degree isosceles cross section.
1	Offset box wrench (for saw stud and #758 plug)	1	#284 Hammer type saw set
1	$9/16$ " open end wrench (for P57805 oil plug)	1	Micrometer tooth set gauge.
		1	#249 8 oz. can SKILSAW lubricant (for gear case)

Before connecting SKILSAW Pneumatic Saw, the air line should be cleaned by letting a blast of air through the hose, the saw blade should be checked for sharpness and the lubricant of both the air motor and the gear case should be inspected and brought up to the correct level. It is advisable to inspect the machine to make certain that no parts have become damaged or broken, that the saw blade is tightened securely between the clamping washers and that the telescopic guard operates freely. SKILSAW Pneumatic Saw is equipped with a 10 ft. length of leader hose having a $\frac{1}{2}$ " nipple on the end which is attached to the throttle handle and a quick, detachable universal coupling at the free end. The 1" open end wrench supplied with the special tool kit should be used in securing the nipple in the throttle handle.

Depth of cut is adjustable by loosening the wing nut (Fig. 5B—Page 1) and raising or lowering foot to desired position. Bevel cutting is possible by loosening the wing nut (Fig. 5a—Page 1) and tilting the foot to desired angle. Before starting a cut, the forward part of the foot should be placed squarely on the timber and the trigger locker plunger pressed down with the thumb. The SKILSAW can then be started by compressing the trigger located in the rear handle. Allow the blade to operate freely for a few seconds before cutting. Do not jam the saw blade into the work as this will not only place undue strain on the tool, but will also result in an untrue cut. Once the cut has been started, the SKILSAW should be guided without forcing, through the balance of the cut.

Two notches in the front of the foot simplify cutting on a line. The deepest notch is located in line with the blade for right angle cuts. The smaller notch is located in line with the blade when the foot is tilted to 45° . When any amount of ripping is to be done, the Rip Fence Guide should be used. About two inches back of the front of the foot on the blade side is a tapped hole. The Rip Fence is attached to the foot at this point by means of a wing screw. The guide can then be adjusted to the desired width. Its location is secured on the runner by tightening the thumb nut. The minimum width of adjustment is $1\frac{1}{2}$ ", obtainable when the guide has been brought up tight against the foot of the saw. The maximum width is $7\frac{1}{4}$ " when the guide has been extended the full length of the runner.

To make a cut in the center of a board instead of starting at the edge, first rest the front part of the foot on the board, manually moving the lower guard to a point where the SKILSAW will rest on the front of the foot and the lip of the guard with the blade clearing the wood. SKILSAW can then be started and lowered gradually until the blade engages and the foot rests flatly upon the work.

LUBRICATING, SERVICE ADJUSTMENTS, TOOLS AND ACCESSORIES

There are four points of lubrication on a SKILSAW Pneumatic Saw. Before checking or refilling any of these, the fittings or plugs should be carefully cleaned so that no foreign matter can become mixed with the lubricant.

AIR MOTOR—The air motor is fitted with two high pressure grease fittings. These care for lubricating the rotor shaft bearings and the governor. Any high grade soft cup grease may be used. Do not force an excessive amount of grease into these fittings. Both rotor shaft bearings have bleeder holes which will allow surplus grease to escape, preventing pressure being built up that might cause "grease bind." The rest of the air motor is cared for entirely by oil located in the oil reservoir. This reservoir should be filled before putting the tool in operation. When used continuously it should be refilled every four hours. To fill the oil reservoir, remove the oil filler plug. (See fig. 7, page 1.) When replacing this plug, be sure the washer located under the head of the oil plug is in good condition and that the plug is tight. The oil regulator will not operate successfully if the seal is not complete.

Any high grade automobile oil may be used for filling the oil reservoir. The correct viscosity is dependent upon local conditions and will vary from "SAE 10" to "SAE 30". A light oil is used in winter, a heavier oil in summer. To determine if the correct grade is being used, hold a piece of paper over the exhaust. If a few drops of oil accumulate on the paper within a minute, it is correct. If there is an absence of oil, then the next lighter grade should be tried. A surplus of oil on the paper indicates that it is too light and a heavier oil should be used.

At least once a week flush the motor out by removing the hose and pouring a quantity of light machine oil into the air inlet. Replace the hose and run the motor until this oil is blown out through the exhaust port.

GEAR CASE—The level of the lubricant in the gear case should be maintained so that it just covers the steel worm gear. Do not fill the gear case above this level—it is necessary to allow room for expansion when the tool becomes heated through use. Pressure built up through heat expansion might force the extra lubricant through the oil seals. The use of genuine SKILSAW lubricant is recommended but any good high tension lubricant that is free of sulphur and meets the following specifications may be substituted. Viscosity 175 @ 210° Saybolt, Gravity 21/23, Flash 530 min. Fire 610 min., S.A.E. (approx) 140, Pour 10 max.

The gear case should be thoroughly cleaned at least twice a year. Kerosene should be used for this purpose—*never use gasoline*. After the gear case has been drained of the old lubricant and completely cleaned out with kerosene, the saw should be placed upside down with the grease plug still removed. This will insure complete drainage so that none of the flushing fluid will remain to dilute the fresh lubricant. The gear case should then be refilled to proper level.

To inspect the gear case or to add lubricant, remove the #758 oil plug (located approximately in the center of the gear case just ahead of the rubber covered top handle) with the offset box wrench. The oil plug should be tightened sufficiently to prevent any leakage of lubricant—it is not necessary that it be air tight as in the case of the air motor oil plug.

COLD WEATHER OPERATION AND STORAGE

The correct lubricant for the air motor in summer and winter use is given above. The gear case lubricant is suitable for operation under practically any temperature condition. It is doubtful if the machine will ever be operated under temperature conditions which are low enough to cause it to congeal. If cold, the machine should be run idle for a minute or two to warm it up before putting it to work.

CONTROLS

Air is released to the saw by pressing down the trigger locker plunger and then compressing the trigger located in the rear handle. When trigger is closed, a leak-proof, poppet-type throttle valve cuts air off instantly. The governor used on the SKILSAW Pneumatic Saw is of the fixed adjustment type and cannot be tinkered with or put out of adjustment. The governor will fluctuate back and forth as the load varies, so that the speed will remain almost constant until the load exceeds the maximum horse-power when the governor is wide open.

SAFETY MEASURES

Positive safety lock prevents accidental starting either while being carried or lying on the ground. Before the throttle valve can be opened, the safety lock must be released.

SKILSAW Pneumatic Saw is equipped with a ball bearing telescopic guard that is operated by a spring and is entirely automatic, affording complete protection to the operator. As the saw blade engages the material, this guard telescopes into the upper guard and does not interfere with the cutting. When cut is completed, the spring returns the guard to a closed position. If the guard should not operate freely, this may be caused by sawdust packing around the bearing. This can be usually corrected by thoroughly blowing away any sawdust which may have accumulated, with an air hose.

SIMPLE TROUBLES AND REMEDIES

If SKILSAW Pneumatic Saw shows any evidence of loss of power, it should be taken apart and inspected to make certain the lubricant is reaching all parts. Lack of lubrication is primarily the cause of most failures of this type. Before dismantling the air motor to determine the cause of insufficient power, be sure that the screen in the reducer is not plugged up. The rotor blades should be replaced whenever they become worn 25% or whenever the motor has been taken apart for inspection and any appreciable wear is in evidence.

SAW BLADES—IMPORTANT

Saw blades must be kept sharp. While the average user of a SKILSAW with a little experience and instruction can do a fairly good job of sharpening, a really first-class job can be done only by a thoroughly experienced saw fitter. We recommend that after a number of resharpenings in the field, the blade be reconditioned by a professional saw man. When a blade becomes warped, a novice would very probably only make its condition worse if he attempted to true it up by "hammering." This is also true of reforming the teeth when they have been filed enough times so as to have lost their original shape.

Complete refitting of the saw blade involves five distinct operations. In the proper sequence, these are: (1) hammering, (2) gumming, (3) setting, (4) jointing and (5) filing. In most cases, a blade can be satisfactorily conditioned by filing and resetting only. Jointing is not necessary if the blade is round and the gullets need not be gummed out until they are two-thirds of their original depth. Unless the blade has been abused, hammering will not be necessary.

SETTING—If the blade does not require hammering, gumming or jointing, setting is the first step in its conditioning. The periphery must be wider than the blade thickness so that the blade will not bind. This is done by alternately bending the point of the teeth as shown in figure 3. For average cutting, the amount of set should be .02". If the lumber is wet or green, the amount of set can be increased up to 50%. Resetting can easily be done by using the saw set and hand hammer furnished in the tool kit. The blade should be placed on the saw set as illustrated in figure 6. The bushing "C" will keep the blade properly centered once the set screw "E" has been placed. The tooth should extend beyond the level part of the anvil "A" approximately one-third of its height. By striking the die "B" solidly with the hand hammer, the tooth will be reformed. The saw set should be either attached to a bench or held securely in a vise and the die should be hit solidly and equally each time.

The amount of set can be checked by using the micrometer tooth set gauge illustrated in figure 7. Before the amount of set can be checked, the amount of correction to be added or subtracted from the readings on the micrometer thimble "F" must be determined. Place the gauge on the blade somewhere between the center and the circumference. With the three legs marked "H" all contacting the blade, adjust the micrometer thimble until the point "J" contacts the blade without disturbing the other three points of contact. Check the reading of the thimble screw which is graduated in thousandths of an inch. It will probably read somewhere between minus .003" and plus .003". If the blade is to have a .02" set and the neutral reading of the thimble screw is minus .003", the reading when the thimble screw point contacts the blade point should be .017". If the neutral reading is plus .003", then the reading at the blade point should be .023".

If the set is less than required, loosen the set screw "E" and move the adjusting arm

"D" in toward the anvil. If the set is too great, move the arm back so that less of the tooth extends over the beveled part of the anvil. When the correct location of "D" has been established, every second tooth should be set as just described. The blade should then be turned over and the alternate teeth set.

FILING—Filing is the sharpening of the saw teeth. It is the second and final step in conditioning a blade requiring only setting and filing. The face of the teeth should be filed straight across as shown in figure 1 and have a hook of approximately 15° . Tooth No. 2 of figure 2 shows an incorrectly filed face that has practically no hook. The radius of the tooth back should be approximately $1\frac{7}{8}$ ". A tooth filed with the back straight, such as tooth No. 3, might break off if a knot is encountered. If the back is formed on too short a radius (tooth No. 4) the gullet will tend to clog up more easily. This is especially true when the lumber contains any amount of pitch.

The points should be filed alternately at a 15° angle as shown in figure 3. When cutting hard wood, however, the points will stay sharp longer if filed straight across. An 8" 3-cornered mill bastard file should be used. (Four of these are included in the tool kit.) When filing, the blade should be secured in a vise or some other clamping arrangement with the jaws as close to the circumference as possible but not so close as to disturb the set of the teeth.

JOINTING—Jointing is the process of truing the blade circumference. When the condition of the blade requires jointing as well as filing and setting, the teeth should be set before the blade is jointed. Filing is always the final operation. When some teeth are shorter than others, the amount of set should be determined by the shortest tooth. Jointing can be done in the field by removing the blade, turning it over and replacing it on the saw shaft arbor so that it will revolve in a direction opposite to that in which it is normally driven. Then, by starting the SKILSAW and holding a piece of abrasive material, such as a section of broken grinding wheel, against the point of the teeth while the blade revolves, the high teeth can be ground down quite quickly. Only a little grinding should be done at one time and the process should be stopped as soon as all teeth are brought to the same height. Caution: *Great care should be exercised in jointing a blade in this manner to avoid any possible injury to the operator.* The dressing stone should be large enough so that the operator's hand need not be brought near the saw teeth. Jointing should never be attempted without being sure that the blade is rotating in a reverse direction. Assuming tooth No. 5 Fig. 2, is the lowest tooth on the blade, then tooth No. 6 and all others will have to be brought down to the height of tooth No. 5.

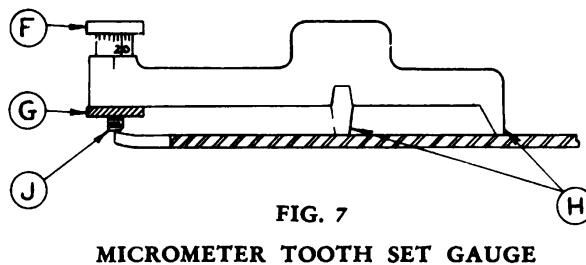
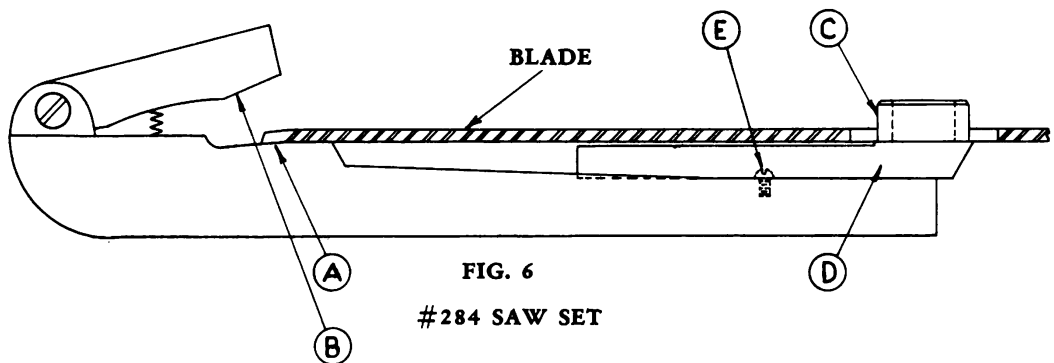
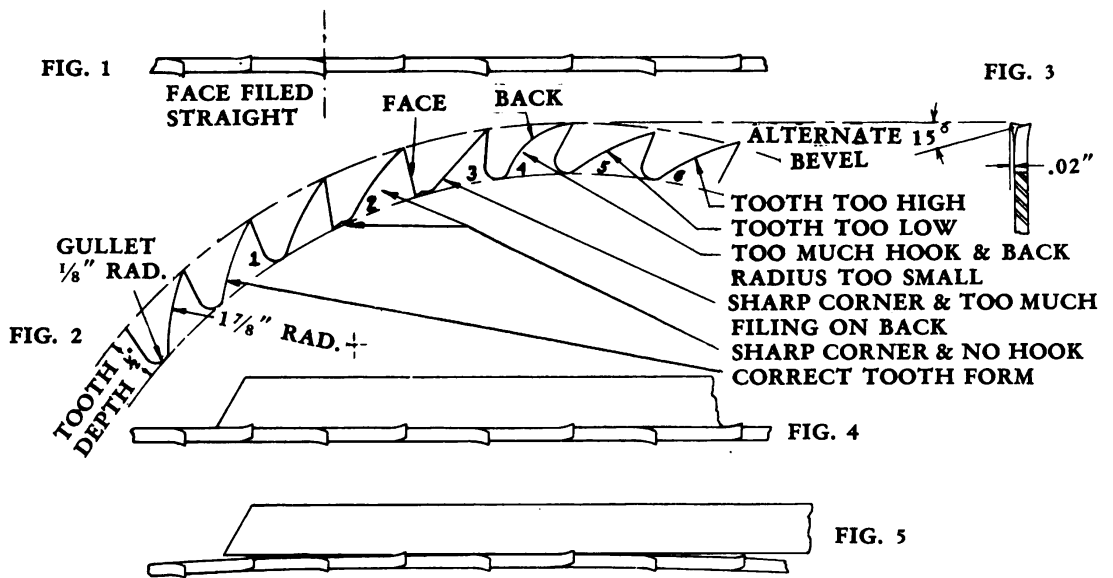
GUMMING—The process of deepening gullets is called gumming. If a blade is to be gummed as well as jointed, filed and set, the gumming should be done first, the other operations in the order previously outlined.

When a blade is filed or jointed, the height of the teeth is necessarily decreased. When the height of the teeth is less than approximately two-thirds their original height, the gullets should be deepened sufficiently to bring the teeth back to their correct height. Gullets should always be semi-circular and have a radius of approximately $\frac{1}{8}$ ". Sharp corners as illustrated by teeth Nos. 2 and 3 should be avoided.

HAMMERING—Hammering is the art of straightening a blade that has become warped or "dished." This is done by placing the blade on a level-surfaced steel plate and hammering the affected section. Fig. 4 shows a section of a blade that is straight. Fig. 5 shows a section of a blade being checked with a straight edge and found to be "dished." In the case of a "dished" blade, the concave surface should be placed face down on the steel plate and the hammering done on the convex surface, working out radially to the periphery. It is best to have this work done by a professional saw fitter since skill is attained only through years of experience.

CUTTING MATERIALS OTHER THAN WOOD

Model 2127 SKILSAW Pneumatic Saw will cut many different materials other than wood. When equipped with the proper abrasive disc it will cut brick, stone, concrete, tile, asbestos cement sheets, steel, cast iron, etc. When equipped with a friction blade thin gauges of sheet iron can be cut. If a hollow-ground metal cutting blade is used, many forms of non-ferrous metals, such as sheet and tube copper, brass, bronze and aluminum may be cut. CAUTION: No one type of abrasive disc or saw blade suits all materials—order carefully for each specific kind of work.



MODEL 2127 SKILSAW PNEUMATIC SAW — MAINTENANCE

Model 2127 SKILSAW Pneumatic Saw can readily be serviced by anyone having experience with portable tools. However, it is manufactured with certain assembly practices, the knowledge of which saves the repair man considerable time and perhaps prevents damage to the tool.

GENERAL INFORMATION

Ball bearings can frequently be ruined by improper handling. They must be kept free of dirt and grit and except in extreme cases they must not be driven into place with blows from a hammer. They should not be installed by pressing through the balls as this tends to indent or spall the races and will cause rapid failure. When a bearing is to be pressed on a shaft, pressure should be applied on the inner race only and when pressing the bearing into a seat, pressure should be applied to the outer race only. When a bearing is to be simultaneously pressed onto a shaft and into a seat, then a uniform pressure should be applied to both the inner and outer races. It is not always possible to follow these approved practices when making repairs in the field and inability to do so can be compensated for only by using extreme care. *Saw bolts* (the parts which hold the blade in place) have *left-hand threads* to avoid loosening of the blade while running. *Leather oil seals are used to seal the gear case.* These should always be installed so that the lip of the leather points toward the inside of the gear case.

The air motor can be disconnected from the front housing by removing the #3239, #4338 and #588 screws that attach these parts. (Be careful not to lose the P68829 star connector which couples these assemblies.) Before doing this, however, it will be necessary to remove the #4305 upper guard and the #4319 foot assembly. The upper guard is attached by means of three #1993 screws and one #1842 screw. The foot is attached to the front housing by a #3212 hinge pin and to the rear housing by a #1840 wing nut which is screwed onto an #1850 stud. A #67 washer is used under the #1840 wing nut. Once the front housing and rear housing have been disengaged, either of these parts can be readily inspected.

REMOVING GEARS

To remove the gears, remove the #1235 front bearing cap and #4349 bearing cap gasket. The #3246 lock nut and #3247 washer should then be removed, exposing the #3232 worm gear bearing. The worm gear bearing and the #4312 worm gear can then be ejected from the front housing by rotating the saw blade opposite to the direction in which it is normally driven by the motor. If the worm gear and bearing do not eject freely, strike the teeth of the blade a light, sharp blow from a rawhide mallet. Remove the #150 saw stud (left hand thread). Lift off the #141 outer washer, the saw blade and the #4317 inner washer. The three #4340 screws securing the #4303 saw shaft bearing cap should then be removed. The #4313 worm wheel and shaft complete with the #579 bearing and #4303 bearing cap can then be driven out by tapping the protruding end of the saw shaft. The bearing cap can be removed from the bearing by a series of light taps from a rawhide hammer. Care should be exercised so as not to damage the #4331 bearing cap gasket. (Never attempt to remove wheel gear unless worm gear has been removed first.) To inspect the #4332 bearing, which also supports the saw shaft, it is necessary to first remove the #4330 bearing retainer, which is attached by means of four #4339 screws. Removal of this bearing exposes the #4315 oil seal. If this seal is taken out, it is very important that it be re-installed so that the lip of the leather points toward the inside of the gear case. The #4309 spacer which is fitted onto the saw shaft revolves in this seal. Should it be necessary to replace the oil seal, this spacer, if it shows any appreciable wear, should be replaced also.

REMOVING TELESCOPIC GUARD

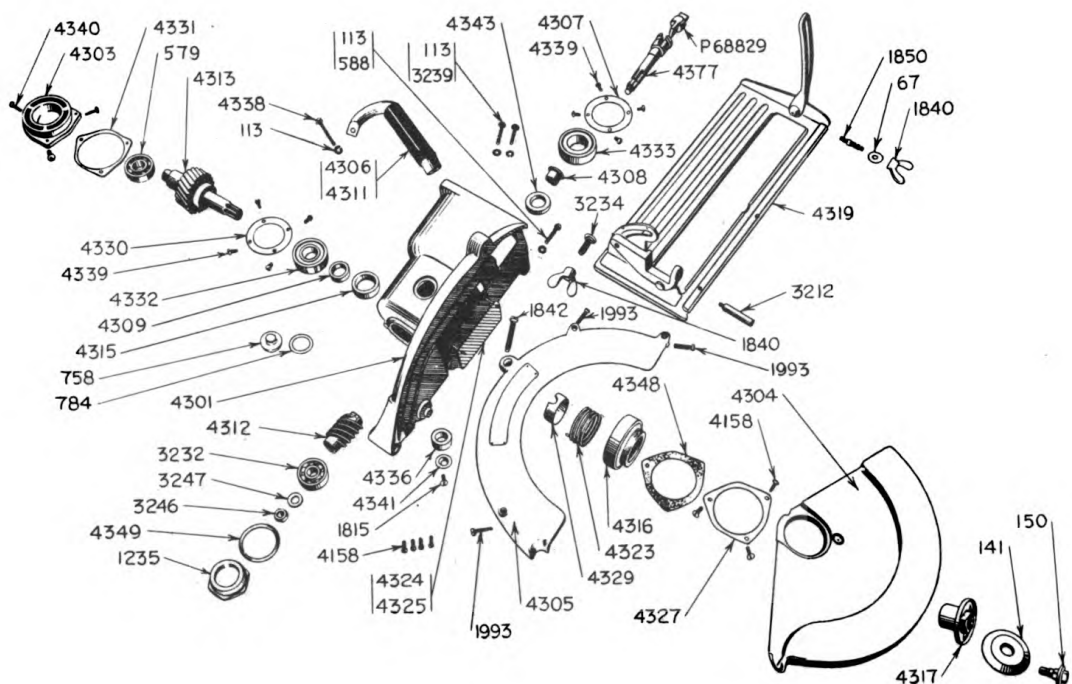
To remove the #4304 telescopic guard, it is not necessary to remove the gears, although replacement will be much easier if this has been done. To remove the guard, remove the #4327 guard bearing retainer, which is held in place with three #4158 screws. Since the guard in its normal position covers the screws, it has been provided with a hole so that by rotating the guard into various positions, these screws are accessible. The #4316 guard bearing, the guard bearing retainer, along with the #4348 retainer gasket, can then be removed as a unit.

To replace the guard when the gears have not been removed, place the saw on its side, blade side up, with the #4329 floating ring (which prevents the guard spring

from contacting the inner washer) in place around the wheel gear shaft. Place the #4323 guard spring in one of the four holes in the guard bearing, and lower the guard and bearing over the wheel gear shaft, engaging the other end of the guard spring with one of the holes in the #4301 front housing. The guard should be lowered in a position which is about 60° beyond its normally closed position, and after the spring has engaged the housing, the guard should be rotated back to a normally closed position and the guard bearing pressed completely into place. The purpose of the semi-circular notch in the brass floating ring is to permit the end of the spring to be seen so that it can be guided into the proper hole in the housing. A certain amount of skill is required to do this, which can be obtained only through practice. It is usually simpler for an inexperienced person to remove the gears, as the guard can then be replaced without difficulty. The #4377 drive shaft can be taken out by pressing on the front or threaded end. The #4333 ball bearing can then be removed for inspection by removing the #4307 bearing retainer, which is held in place by four #4339 screws. Removal of this bearing also permits inspection of the #4343 oil seal. Instructions regarding the oil seal for the saw shaft apply here also. The lip of the leather should be pointed into the gear case and the spacer, if worn, should be replaced. The part number of the drive shaft oil seal spacer is #4308.

Removal of the #4324 chamber cover and the #4325 chamber cover gasket which are held in place by four #4158 screws permits inspection of the gear case. It is desirable to remove this cover and gasket when cleaning out the gear case (See gear case Page 3).

A Model 2127 pneumatic SKILSAW, operated on 90 lbs. air pressure at the compressor, should have a no-load blade speed of between 800 and 1200 R.P.M. The full-load speed should be between 600 and 700 R.P.M.



MODEL 2127 SKILSAW-MAINTENANCE

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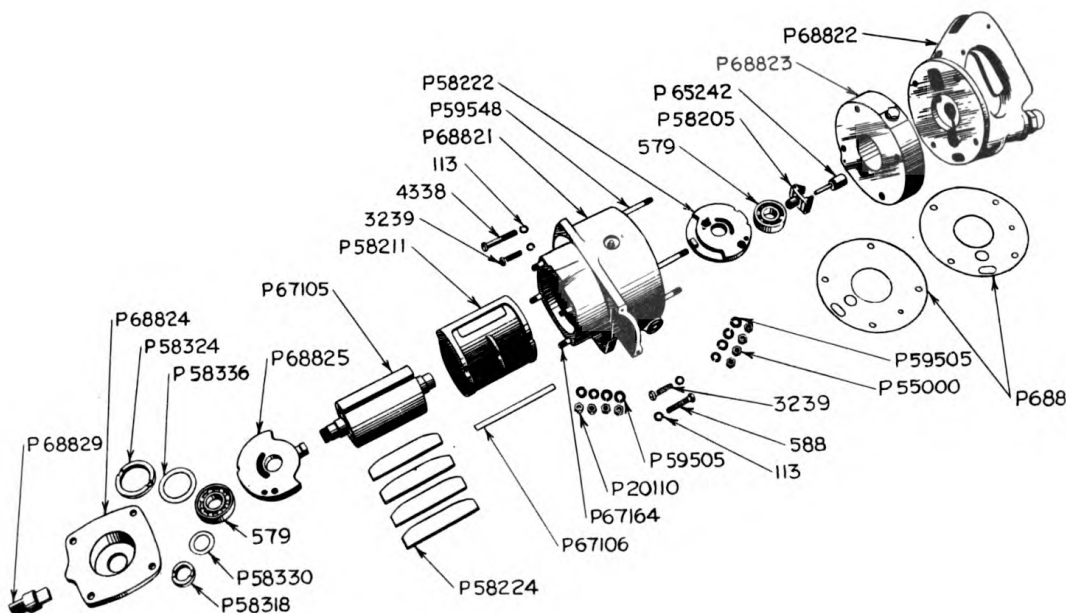
INSPECTING THE AIR MOTOR

To inspect the air motor, remove the P55000 stud nuts which secure the throttle handle assembly to the air motor housing. Use the $\frac{3}{8}$ " open end wrench supplied for this purpose. Lift off the P68822 handle assembly and the P68823 cylinder cap assembly. (Be careful not to break or damage the two P68826 gaskets, which must maintain an air-tight seal between the handle and the cylinder cap and between the cylinder cap and the cylinder.) Lift off the P65242 governor stem assembly. Remove P20110 cylinder cover nuts and lift off the P68824 cylinder cover. Hold the larger flatted side of the P68829 star connector in a vise and fit the slot in lower end of rotor shaft over the opposite flatted side of the star connector, to hold the rotor stationary while the P58205 governor assembly (left-hand thread) is unscrewed from the upper end of rotor.

To remove the assembly of P67105 rotor, P68825 lower center plate and P58224 rotor blades, place a $\frac{1}{4}$ " diameter pin in the governor hole in the upper end of rotor shaft and strike a light blow. After this assembly has been removed, the P58222 upper center plate can be taken out by tapping with a mallet through the P58211 cylinder bushing. The P58211 cylinder bushing should slide out of the P68821 cylinder. In some cases, the fit may be tight enough so that some pressure may have to be applied. The upper and lower center plates and the cylinder bushing are located in the cylinder by the P67106 key.

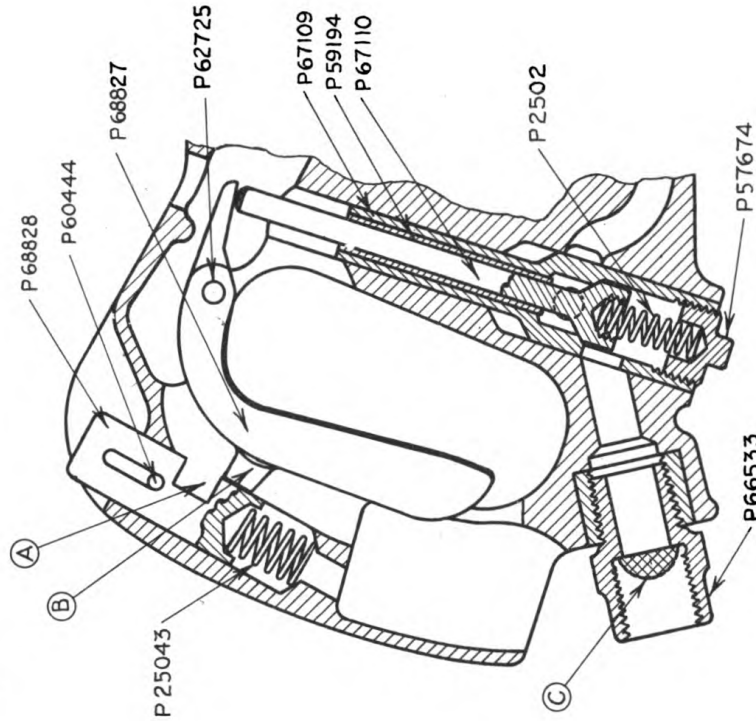
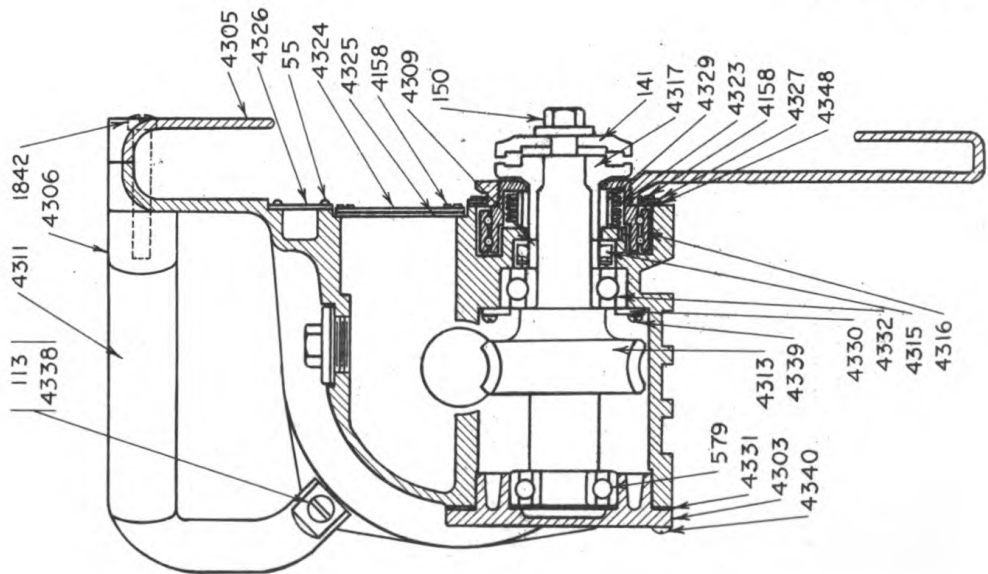
To remove the P67105 rotor from the P68825 lower center plate, hold the center plate between soft jaws in a vise and remove the slotted P58324 clamp nut, which has external threads and is threaded into the P68825 lower center plate. Then hold the rotor body between soft jaws in a vise and remove the slotted P58318 clamp nut, which has internal threads and is threaded onto the rotor shaft. The rotor can now be removed from the center plate.

The 579 upper and lower rotor bearings should always feel firm. If they show signs of wear or their condition is doubtful, replace them, for these bearings support the most important part of the air motor—the P67105 rotor. If the rotor drags on the end plate or cylinder bushing, it will wear out these parts as well as itself, causing serious loss of power.



MODEL 2127 PNEUMATIC SKILSAW

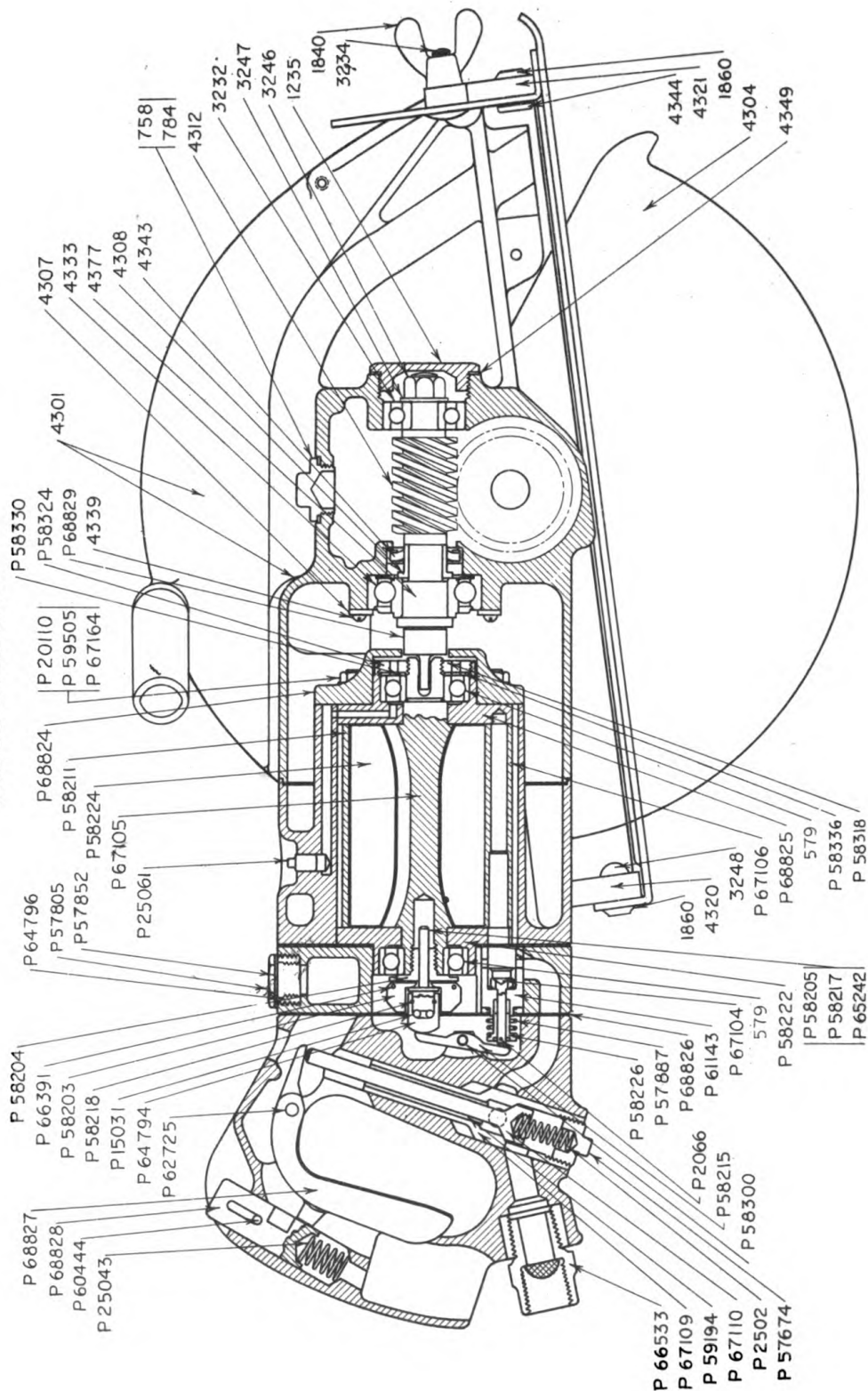
PARTS DRAWING



THROTTLE VALVE TRIGGER P68827 can not be compressed, opening the throttle valve, until the PLUNGER P68828 has been pressed down so that the milled section (A) aligns with the dog (B). This is a safety feature which prevents accidental starting which might cause injury to the operator. The SCREEN (C) should be inspected regularly and cleaned when necessary. If the screen becomes clogged, it will of course restrict the flow of air, resulting in loss of power.

MODEL 2127 PNEUMATIC SKILSAW

PARTS DRAWING

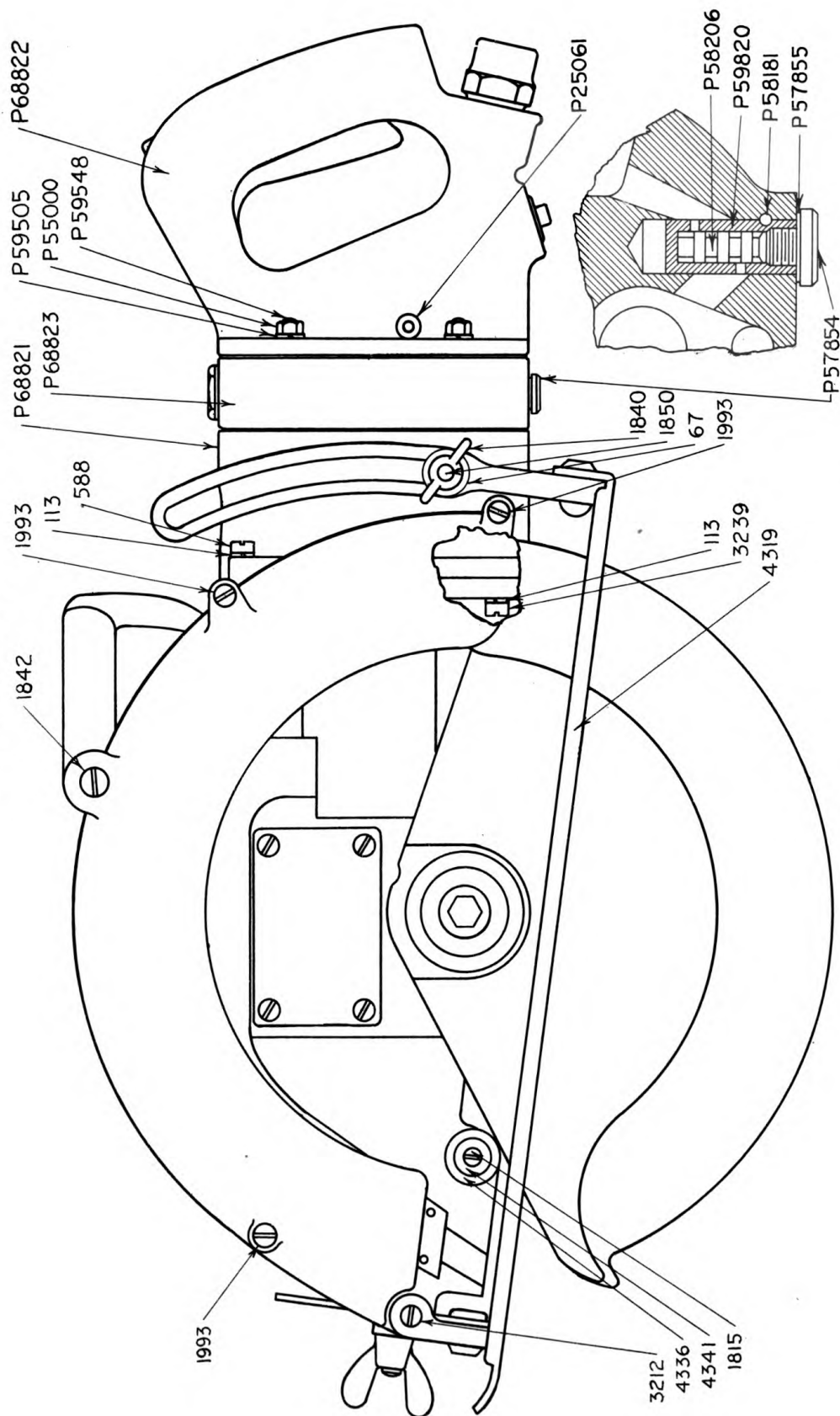


PARTS LIST

Part No.	Part Name	No. Used	Remarks	Price
55	Drive Screw	17	For 4326 & Saw Guard N.P.	.01
67	Steel Washer	2	Under 1840	.05
113	Lock Washer	4	For 588, 3239 & 4338	.01
141	Outer Washer	1		.80
150	Saw Shaft Bolt	1	Special Left Hand	.40
579	Ball Bearing—N.D. 1203	3	Saw Shaft and Rotor	2.10
588	Screw 1/4-20x1 1/4 Fil. Hd.	1	For 4301 to 4302	.10
758	Lubricating Screw—Special	1	For 4301	.45
784	Gasket	1	For 758	.05
1235	Front Bearing Cap	1		.80
1815	Screw 10-24 x 1/2 F.H. Self Tap	1	For 4336	.05
1840	Wing Nut	2	For Foot	.15
1842	Screw 1/4-20 x 1 3/4 Fil. Hd.	1	For Top Handle	.02
1850	Stud 5/16-18 x 1-7/16 Special	1	For Rear Support Bar	.15
1993	Screw 10-24 x 7/8 Fil. Hd.	3	For Upper Guard	.01
3212	Hinge Pin	1	For Foot	.35
3232	Ball Bearing—N.D. 3301	1	Front of Worm	2.30
3234	Bolt 5/16-18 x 1	1	For 4321 to 4322	.20
3239	Screw 1/4-20 x 1 Fil. Hd.	2	For 4301 to 4302	.01
3246	Nut 3/8-20 Spec. Self Lock	1	Front End Drive Shaft	.20
3247	Washer—Stl. 3/8 I.D. 11/16 O.D. .031 Thk	1	Front End Drive Shaft	.05
4158	Screw 8/32-1/2 Binder Hd.	7	For 4324 & 4327	.05
4301	Front Housing	1		36.00
4303	Bearing Cap	1	Saw Shaft	1.10
4304	Telescopic Guard	1		4.50
4305	Upper Guard	1		4.25
4306	Top Handle	1		2.00
4307	Center Bearing Retainer	1	Drive Shaft	.35
4308	Oil Groove and Spacer	1		.80
4309	Spacer for Saw Shaft	1	Saw Shaft	.40
4311	Rubber Cover	1	For Top Handle	.25
4312	Worm	1	Matched	
4313	Worm Wheel	1	Set	14.00
4315	Oil Seal	1	Saw Shaft	.85
4316	Ball Bearing	1	Special for 4304	3.75
4317	Inner Washer	1	Splined End Saw Shaft	2.80
4319	Foot Assembly	1		8.50
	2—1860 Washer		For 3248 & 4344	.15
	1—3248 Rivet		For Rear Support Bar	.15
	1—4318 Foot		Part of 4319	
	1—4320 Rear Support Bar			1.35
	1—4321 Hinge		Riveted to 4322	1.85
	1—4322 Front Bracket		Spot-Welded to 4318	
	1—4342 Reinforcing Bar		Spot-Welded to 4318	
	1—4344 Rivet		For Front Support Bar	.15
4323	Spring for 4304—Special	1	For 4304	.40
4324	Chamber Cover	1	For 4301	.50
4325	Gasket	1	For 4324	.05
4326	Blower Cover	1		.50
4327	Bearing Retainer	1	For 4316	.40
4329	Floating Ring	1	For 4323	.35
4330	Bearing Retainer	1	For 4332	.35
4331	Gasket	1	For 4303	.10
4332	Ball Bearing—N.D. 7504	1	Long End Saw Shaft	2.70
4333	Ball Bearing—N.D. 87604	1	Rear of Drive Shaft	4.00
4336	Rubber Stop	1	For 4304	.20
4338	Screw 1/4-20 x 1 1/2 Fil. Hd.	1	For 4306 & 4301 to 4302	.03
4339	Screw 8-32 x 3/8 R.H. Self Tap	8	For 4307 & 4330	.03
4340	Screw 8-32x3/8 Binder H. Self Tap	3	For 4303	.03
4341	Washer—Special	1	For 4336	.05
4343	Oil Seal	1	For Drive Shaft	.65
4348	Dust Ring	1	For 4327	.05
4349	Gasket	1	For 1235	.15
4377	Drive Shaft	1		4.75
P2066	Governor Valve Key	1		.05

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PARTS DRAWING



PARTS LIST

(continued from page 12)

Part No.	Part Name	No. Used	Remarks	Price
P20110	Nut	4	For Cylinder & Cover	.05
P55000	Nut	4	For Cyl. Cap & Hdle. Stud	.05
P57887	Spring	1	For Governor Valve	.15
P58205	Governor Assembly	1		4.60
	2—P58203 Weight			1.00
	1—P58204 Support			2.25
	2—P66391 Pin			.05
P58211	Bushing	1	For Cylinder	14.30
P58222	Upper Center Plate	1		10.15
P58224	Blade	4	For Rotor	.35
P58226	Guide Sleeve	1		.35
P58318	Clamp Nut	1	On Rotor	.60
P58324	Clamp Nut	1		.65
P58330	Washer	1	On Rotor	.10
P58336	Washer	1	For Clamp Nut	.10
P59505	Washer	8		.10
P65242	Governor Stem Assembly	1		1.85
	3—P15031 Ball			.02
	1—P58217 Stem			.85
	1—P58218 Spring			.10
	1—P64794 Cap			.75
P67104	Valve	1	For Governor	1.15
P67105	Rotor	1		16.50
P67106	Bushing & Center Plate Key	1		.10
P68821	Cylinder Assembly	1		22.00
	1—P25061 Oiler			.10
	4—P59548 Stud			.15
	4—P67164 Stud			.15
P68822	Grip Handle Assembly	1		28.00
	1—P2502 Spring			.10
	1—P25043 Plunger Spring			.15
	1—P25061 Oiler			.10
	1—P57674 Cap			1.25
	1—P58215 Lever			.50
	1—P58300 Pin			.10
	1—P59194 Stem Bushing			.80
	1—P60444 Plunger Pin			.05
	1—P62725 Trigger Pin			.10
	1—P66533 Reducer with Strainer			1.15
	1—P67109 Valve Bushing			2.00
	1—P67110 Valve			1.10
	1—P68827 Trigger			2.00
	1—P68828 Plunger			1.65
P68823	Cylinder Cap Assembly	1		14.00
	1—P57805 Oil Plug			.20
	1—P57852 Washer			.05
	1—P57854 Cap			.45
	1—P57855 Packing			.05
	1—P58181 Pin			.05
	1—P58206 Regulator			.05
	1—P59820 Bushing			.35
	1—P61143 Valve Bushing			1.20
	1—P64796 Plug			.25
P68824	Cylinder Cover	1		3.00
P68825	Lower Center Plate	1		8.50
P68826	Gasket	2	For Cyl. & Cyl. Cap & Hdle.	.20
P68829	Star Connector	1	For Drive Shaft	1.50

SKILSAW, INC.

CHICAGO, ILLINOIS

LITHO. in U.S.A.

